# Software Requirements Specification

for

## Restaurant Management System

**Version 2.0 approved** 

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12-02-2018

## **Table of Contents**

| 1.   Introduction  | Table of Contentsii |                        |                                       |   |  |  |  |
|--|---------------------|------------------------|---------------------------------------|---|--|--|--|
| 1. Introduction  | Re                  |                        |                                       |   |  |  |  |
| 1.1 Purpose       1.2 Intended Audience and Reading Suggestions         1.3 Product Scope       1.4 References         1.4 References       2. Overall Description         2. Overall Perspective       2.1 Product Perspective         2.2 Product Functions       2.2 Product Functions         2.3 User Classes and Characteristics       2.2 Operating Environment         2.5 Design and Implementation Constraints       2.6 User Documentation         2.7 Assumptions and Dependencies       3         3. External Interface Requirements       2         3.1 User Interfaces       2         3.2 Hardware Interfaces       2         3.3 Communications Interfaces       2         4. System Features       4         4.1 System Feature I       5         5. Other Nonfunctional Requirements       5         5.1 Performance Requirements       6         6. Other Requirements       6         Appendix A: Glossary       7                                |                     |                        | ·                                     |   |  |  |  |
| 1.2 Intended Audience and Reading Suggestions       1.3 Product Scope         1.4 References       2         2. Overall Description       2.1 Product Perspective         2.1 Product Functions       2.2 Product Functions         2.3 User Classes and Characteristics       2.4 Operating Environment         2.5 Design and Implementation Constraints       2.6 User Documentation         2.7 Assumptions and Dependencies       3         3. External Interface Requirements       4         3.1 User Interfaces       4         3.2 Hardware Interfaces       4         3.3 Software Interfaces       4         3.4 Communications Interfaces       4         4.1 System Features       4         4.1 System Features       4         5.1 Performance Requirements       5         5.2 Safety & Security Requirements       6         6. Other Requirements       5         Appendix A: Glossary       5   | ••                  |                        |                                       |   |  |  |  |
| 1.3 Product Scope.       1.4 References.         1.4 References.       1.2 Overall Description.         2.1 Product Perspective.       2.2 Product Functions.         2.2 Product Functions.       2.3 User Classes and Characteristics.         2.4 Operating Environment.       2.5 Design and Implementation Constraints.         2.6 User Documentation.       2.7 Assumptions and Dependencies.         3. External Interface Requirements.       2.3 User Interfaces.         3.1 User Interfaces.       2.4 Andware Interfaces.         3.2 Hardware Interfaces.       2.3 Software Interfaces.         3.4 Communications Interfaces.       2.4 System Features.         4.1 System Features.       2.4 System Features.         4.1 System Feature 1       2.5 Other Nonfunctional Requirements.         5.1 Performance Requirements.       6. Other Requirements.         6. Other Requirements.       3.4 Glossary.  |                     |                        |                                       |   |  |  |  |
| 1.4 References       1.2 Overall Description         2.1 Product Perspective       2.2 Product Functions         2.2 Product Functions       2.3 User Classes and Characteristics         2.3 User Classes and Characteristics       2.4 Operating Environment         2.5 Design and Implementation Constraints       2.6 User Documentation         2.7 Assumptions and Dependencies       2.7 Assumptions and Dependencies         3. External Interface Requirements       2.3 User Interfaces         3.1 User Interfaces       2.4 Asystem Feature Interfaces         3.3 Software Interfaces       2.4 Communications Interfaces         4.1 System Features       2.4 System Features         4.1 System Feature I       2.5 Other Nonfunctional Requirements         5.1 Performance Requirements       6.5 Other Requirements         6. Other Requirements       6. Other Requirements         Appendix A: Glossary       5.7 Section Security Requirements |                     |                        |                                       |   |  |  |  |
| 2.1 Product Perspective  |                     |                        |                                       |   |  |  |  |
| 2.1 Product Perspective  | 2.                  | Ov                     | rerall Description                    | 2 |  |  |  |
| 2.2 Product Functions       2         2.3 User Classes and Characteristics       2         2.4 Operating Environment       2         2.5 Design and Implementation Constraints       2         2.6 User Documentation       2         2.7 Assumptions and Dependencies       3         3. External Interface Requirements       4         3.1 User Interfaces       4         3.2 Hardware Interfaces       4         3.3 Software Interfaces       4         3.4 Communications Interfaces       4         4.1 System Features       4         4.1 System Feature 1       5         5.1 Performance Requirements       6         5.2 Safety & Security Requirements       6         6. Other Requirements       6         Appendix A: Glossary       5  |                     |                        |                                       |   |  |  |  |
| 2.4 Operating Environment  |                     | 2.2                    | Product Functions                     | 2 |  |  |  |
| 2.5 Design and Implementation Constraints 2.6 User Documentation 2.7 Assumptions and Dependencies  3. External Interface Requirements 3.1 User Interfaces 3.2 Hardware Interfaces 3.3 Software Interfaces 3.4 Communications Interfaces 4. System Features 4.1 System Features 5. Other Nonfunctional Requirements 5.1 Performance Requirements 5.2 Safety & Security Requirements 6. Other Requirements   |                     |                        |                                       |   |  |  |  |
| 2.6 User Documentation.       2         2.7 Assumptions and Dependencies.       3         3. External Interface Requirements.       4         3.1 User Interfaces.       4         3.2 Hardware Interfaces.       4         3.3 Software Interfaces.       4         3.4 Communications Interfaces.       4         4. System Features.       5         4.1 System Feature 1.       5         5. Other Nonfunctional Requirements.       5         5.1 Performance Requirements.       6         5.2 Safety & Security Requirements.       6         6. Other Requirements.       6         Appendix A: Glossary.       5  |                     |                        |                                       |   |  |  |  |
| 2.7 Assumptions and Dependencies.       3         3. External Interface Requirements.       4         3.1 User Interfaces.       4         3.2 Hardware Interfaces.       4         3.3 Software Interfaces.       4         3.4 Communications Interfaces.       4         4. System Features.       4         4.1 System Feature 1.       5         5. Other Nonfunctional Requirements.       5         5.1 Performance Requirements.       6         5.2 Safety & Security Requirements.       6         6. Other Requirements.       5         Appendix A: Glossary.       5  |                     |                        |                                       |   |  |  |  |
| 3. External Interface Requirements       4         3.1 User Interfaces       4         3.2 Hardware Interfaces       4         3.3 Software Interfaces       4         3.4 Communications Interfaces       4         4. System Features       5         4.1 System Feature 1       5         5. Other Nonfunctional Requirements       6         5.1 Performance Requirements       6         5.2 Safety & Security Requirements       6         6. Other Requirements       6         Appendix A: Glossary       5  |                     |                        |                                       |   |  |  |  |
| 3.1 User Interfaces       4         3.2 Hardware Interfaces       4         3.3 Software Interfaces       4         3.4 Communications Interfaces       4         4. System Features       5         4.1 System Feature 1       5         5. Other Nonfunctional Requirements       5         5.1 Performance Requirements       6         5.2 Safety & Security Requirements       6         6. Other Requirements       7         Appendix A: Glossary       7   |                     |                        | •                                     |   |  |  |  |
| 3.2 Hardware Interfaces.       4         3.3 Software Interfaces.       4         3.4 Communications Interfaces.       4         4. System Features.       5         4.1 System Feature 1.       5         5. Other Nonfunctional Requirements.       6         5.1 Performance Requirements.       6         5.2 Safety & Security Requirements.       6         6. Other Requirements.       6         Appendix A: Glossary.       7   | 3.                  |                        |                                       |   |  |  |  |
| 3.3 Software Interfaces  |                     |                        |                                       |   |  |  |  |
| 3.4 Communications Interfaces  |                     |                        |                                       |   |  |  |  |
| 4. System Features   |                     |                        |                                       |   |  |  |  |
| 4.1 System Feature 1   | _                   |                        |                                       |   |  |  |  |
| 5. Other Nonfunctional Requirements  | 4.                  |                        |                                       |   |  |  |  |
| 5.1 Performance Requirements   |                     |                        | ·                                     |   |  |  |  |
| 5.2 Safety & Security Requirements   | 5.                  |                        |                                       |   |  |  |  |
| 6. Other RequirementsAppendix A: Glossary  |                     |                        |                                       |   |  |  |  |
| Appendix A: Glossary   |                     |                        | · · · · · · · · · · · · · · · · · · · |   |  |  |  |
| 11   | 6.                  | 5. Other Requirements7 |                                       |   |  |  |  |
| 11   | Αı                  | Appendix A: Glossary7  |                                       |   |  |  |  |
|  | -                   |                        |                                       |   |  |  |  |

## **Revision History**

| Name Date     |                | Reason For Changes                               | Version |
|---------------|----------------|--|---------|
| Language used | 12/02/20<br>18 | The system was not compatible with java platform | 2.0     |
|               |                |  |         |

#### 1. Introduction

#### 1.1 Purpose

This document presents a detailed explanation of the objectives, features, user interface and application of Restaurant Management System in real life. It will also describe how the system will perform and under which it must operate. In this document it will be also shown user interface.

#### 1.2 Intended Audience and Reading Suggestions

This document is intended for different types of readers such as restaurant owner, system designer, system developer and tester. By reading this document a reader can learn about what the project is implemented for and how it will present it's basic ideas.

#### 1.3 Product Scope

This system will help to manage and run the restaurant business systematically. In this management system, we will provide an app that can be used by the customers to order food. Customers can make payment through debit or credit cards which will be integrated with the management software. Customers can see current discount facility of the restaurant. All the information about daily expenses and profit will be saved in the system. Also the required information's about employees will be saved in the system which can be only accessed by the system admin.

#### 1.4 References

www.google.com-the world's information.
www.wikipedia.com-free online encyclopedia.
www.cnet.com -technology portal.

IEEE Std 830-1998 IEEE Recommended Practice

IEEE. *IEEE Std 830-1998 IEEE Recommended Practice for Software Requirements Specifications*. IEEE Computer Society, 1998.

## 2. Overall Description

#### 2.1 Product Perspective

The Restaurant Management System helps the restaurant manager to manage the restaurant more effectively and efficiently by computerizing meal ordering, billing and inventory control. The system processes transaction and stores the resulting data. Reports will be generated from these data which help the manager to make appropriate business decisions for the restaurant.

The whole management system is designed for a general Computerized Digital Restaurant. So that any restaurant owner can get it and can start automated process to his restaurant.

#### 2.2 Product Functions

| Whole functions will performed through this order :<br>Food Order via App |
|---|
| Take Order  |
| Serve Food  |
| □ Payment   |
| Available food  |
| Required food   |
| Customer Information  |

#### 2.3 User Classes and Characteristics

The Restaurant Management System has five active actors and one cooperating system. The customer can access the system and order food. The Chef can see the order and after preparing the food he will tell the system that the food is ready. The waiter can get the confirmation of food from the chef through the system and deliver it to the right table. The cashier can access the system and receive the payment from customers. The Admin can edit the price, count total earning and expenditure.

### 2.4 Operating Environment

Operating System: Minimum Windows XP or Windows VISTA. Better environment Windows 7,

8, 8.1, 10.

Language: HTML,CSS,PHP,Javascript

#### 2.5 Design and Implementation Constraints

There are some constraints which costs more for the system. If those constraints can overcome then this whole system will perform best. They are-

- 1. IOS App and Windows App.
- 2. Information flow or data flow can be controlled and more effective.
- 3. Faster server system such as LINUX server.
- 4. C# can be use for more security.

#### 2.6 User Documentation

It will provide specific guidelines to a user for using the Restaurant management system.

#### 2.7 Assumptions and Dependencies

If this system have IOS and Windows app then customers who use such kind of smartphone (*windows and ios*) will be more benefited. If there are more Tablets for each tables the whole system performance will be better. For more secure system it is beneficial to use CC camera and TV.

## 3. External Interface Requirements

There are many types of interfaces as such supported by this software system namely; User Interface, Software Interface and Hardware Interface.

#### 3.1 User Interfaces

The user interface will be implemented using any android smartphone app browser. This interface will be user friendly. So that every kind of customer can place the food order easily. Customers can also give feedback through it easily with some demo comment or if they are keen to write their review by own they can do it.

#### 3.2 Hardware Interfaces

There shall be logical address of the system in IPv6 format.

#### 3.3 Software Interfaces

The system shall communicate with the Configurator to identify all the available components to configure the product.

The system shall communicate with the content manager to get the product specifications.

#### 3.4 Communications Interfaces

Communication function required the Internet protocol version 6 and it will follow HTTPS. It will use FTP for whole system with local server.

## 4. System Features

#### 4.1 Food Order via App

Customer can order food with the app.

#### 4.2 Take Order

The chef will take the order and if it is available to make then he will confirm the order and start to prepare food.

#### 4.3 Serve Food

When the food is ready to be served then the chef will alert the waiter. After serving the food the waiter will insure the order as served.

#### 4.4 Payment

The cashier will receive the payment.

#### 4.5 Available food

The Chef will add what goods are available and the admin can see that data.

#### 4.6 Required foods

The chef will add what goods are required.

#### 4.7 Customer Information

The customer will be get registered and be the member of special customer

#### 4.1 System Feature 1

#### 4.1.1 Functional Requirements:

#### 4.1.1.1 Use Case View

The use cases for each of the actors are described in this section.

#### **Customer Use Case**

Use case: Order Food

**Description** The Customer can order food and see their payment receipt and pay.

#### **Chef Use Case**

Use case: Prepare Food

#### Description

The chef can see the orders of customers and checks whether this order can be taken or not and then confirms the order and starts preparing the food. When the food is ready the chef alerts the waiter to serve the food. He can also edit what ingredients are available and what ingredients are demanded.

#### **Waiter Use Case**

Use case: Serve Food

#### Description

The waiter can see the food orders and the ready foods in the kitchen to be served. After serving the food the waiter will mark the order as served.

#### **Cashier Use Case**

Use case: Take Payment

#### Description

The Cashier can only take payment from the customer and save it into the system database with respect to the food item and take the payment accordingly.

#### **Admin Use Case**

Use case: Maintain System

#### Description

The Admin has full access to the system. He maintains the whole system to ensure better and secure service and solves any error appeared in the system.

## 5. Other Nonfunctional Requirements

#### **5.1** Performance Requirements

| The product will be based on local server.            |  |  |
|---|--|--|
| The product will take initial load time.              |  |  |
| The performance will depend upon hardware components. |  |  |
| Payment system will be fully secure.                  |  |  |
| Different database for employee.                      |  |  |

#### 5.2 Safety & Security Requirements

| The source code | e developed for | this system shal | l be maintained in | configuration r | nanagement tool. |
|-----------------|-----------------|------------------|--------------------|-----------------|------------------|
|                 |                 |                  |                    |                 |                  |

The whole system is secured. Only Admin can access all the data.

## **6. Other Requirements**

#### **6.1 Licensing Requirements**

Not Applicable

#### 6.2 Legal, Copyright, and Other Notices

All right reserved.

#### **6.3 Applicable Standards**

It should be as per the industry standard.

## **Appendix A: Glossary**

We will use some acronyms through this document. Abbreviations and definition of some useful terms we will use are given below:

| Гомп | Definition |
|------|------------|
| lerm | Deminino   |

System Admin is a person who is

responsible for managing the whole system and who has full access to the

system.

System User A person who is using or operating the

system but with a limited privilege.

Database Collection of all the information

monitored by this system.

Field A cell within a form.

Software Requirements Specification

(SRS)

A document that completely describes all

of the functions of a proposed system and the constraints under which it must

operate. For example, this document

Stakeholder Any person who is involved in the

development process of the software.

## **Appendix B: Analysis Models**

